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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/600,006	06/19/2003	Andrew B. Arata	16200.0006U4	6057

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PAK, JOHN D	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/600,006	ARATA, ANDREW B.	
	Examiner	Art Unit	
	JOHN PAK	1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 March 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *30 and 36-45* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *30 and 36-45* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Claims 30 and 36-45 are pending in this application.

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/27/2007 has been entered.

At the outset, the following claim interpretation is noted:

(1) Complex of the formula Ag^+CA^- wherein the concentration of the complex is claimed in terms of % by volume

Ag^+CA^- is *not* a liquid at ambient temperature.

Therefore, the only "volume" it has is the volume it takes up within the solvent. Since the solvent is water + citric acid, this feature can be interpreted, in the absence of contrary evidence, as that volume which Ag^+CA^- takes up within the solvent.

(2) Concentration of citric acid in terms of % (unspecified) or % by volume

Citric acid is *not* a liquid at ambient temperature.

Claims 38-40 recite aqueous solutions of citric acid comprising 1% or more of citric acid. What kind of % (by weight, by part, by volume, molar), the claims do not specify. As will be discussed below, not specifying the type of % is considered new matter. Claims 41-44 on the other hand recite citric acid in terms of % by volume.

Since citric acid is a solid at ambient temperature, the only "volume" it

has is the volume it takes up within a solvent. Alternatively, since citric acid is typically dissolved in water, the volume of such solution of citric acid could be the % by volume the claims are referencing.

The affected claims (unspecified % and % by volume) are interpreted to read on % by volume of a solution of citric acid. In other words, it appears that if there were a 10 wt% citric acid solution in water, that solution, in a quantity of 1-10% by volume reads on claim 41. Similarly, if there were a 0.00000000000000000001 wt% citric acid solution in water, that solution, in a quantity of 1-10% by volume reads on claim 41.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 30 and 36-45 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

(1) <u>All claims</u>

All presently pending claims recite an aqueous solution of citric acid comprising a complex having the formula $Ag^{+}CA^{-}$. This is a formula that is somewhat different from

ordinary silver citrate, which is Ag_3CA. See the Merck Index, 12th ed., page 1462. The original disclosure states (page 21, lines 14-17) (emphasis added):

> **The Merck Index, Eleventh Edition (1989) page 1348 states that silver citrate is soluble in 3500 parts water. A concentration of 1 to 3500 corresponds to 285 parts per million (ppm). Obviously, the silver citrate formed in accordance with the above process has different solubility than other forms of silver citrate.**

Every single reference to the invention silver citrate in the originally filed disclosure makes clear that the silver was electrolytically generated in a solution of citric acid (i.e. the "above process"). Present claims make no mention of electrolytic generation of silver in citric acid. Present claims merely read on Ag^+CA^- in citric acid, without requiring that the silver was electrolytically generated in citric acid. Therefore, the subject matter of the present claims wherein silver does not read on electrolytically generated silver in a solution of citric acid is deemed to be new matter, which fails to find adequate descriptive support from the originally filed disclosure.

(2) Claims 38-40

Claims 38-40 recite aqueous solutions of citric acid comprising greater than 1% or more of citric acid. The percentages are expressed without any explanation, e.g. % by weight, % by volume, % by mole, % by part, etc.

The record available in this application shows that the originally filed disclosure

is specific to % by volume for citric acid. Applicant states that specification page 22, line 3 provides support, but the reproduced said line 3 below fails to show any descriptive support for any % type for the citric acid ---

> **acid. The citric acid anion is the counterion for this complex ion (Ag(CA)x)+ l.e. (CA). CA is citric acid or is ($C_6H_8O_7$ - H_2O). Another possibility is a zwitterion, where the negative charge is on the complex itself, (Ag+CA-) where the total charge of the complex is neutral. Either or both of these species may exist in the silver citrate formed in accordance with the above process.**

Since applicant's invention asserts an unusually soluble form of silver citrate, the precise characteristic and solvent/solute environment would be significant. Consequently, changing % by volume of a solvent environment component to "%" without any modifier is deemed to be new matter under the facts available in this application, which new matter fails to find adequate descriptive support from the originally filed disclosure.

(3) Claims 44-45 (independent 44 reproduced below, emphases added):

44. (New) **An aqueous solution of citric acid comprising:**

a) **from 0.1% to 10% by volume citric acid; and**

b) **from 4.07 ppm to 300 ppm silver citrate having the formula: Ag^+CA^-.**

First, this is the first time that this particular combination of citric acid amount and silver citrate amount has been claimed or disclosed in this or earlier related applications.

Second, there is no specific disclosure of 4.07 ppm of silver citrate in the originally filed disclosure. The only instance of 4.07 ppm is for copper. See the paragraph bridging pages 24-25 and page 25, lines 8-13.

Third, there is no specific disclosure 0.1% to 10% by volume citric acid being used to combine with any amount of silver citrate, let alone 4.07 to 300 ppm silver citrate. In this regard, the following specification disclosure is noted (reproduced from the published application 2005/0274624; paragraph bridging original pages 23-24):

> **[0101]** The results seen in **FIG. 6** for week 21 confirm the stability of the silver citrate in the 5.0% and 10% citric acid solutions. The stability of the silver citrate in the 1.0% citric acid solution experienced significant reductions during the last phase of the study. The minimum concentration of the citric acid solution is therefore some value greater than 1.0% and less than 5.0%. The maximum concentration of the citric acid in the aqueous solution has not been determined by test. However, it is believed that the maximum concentration of the citric acid in the aqueous solution much greater than 10.0%. It is also evident from these results, that the higher the concentration of the citric acid in the aqueous solution, the greater the concentration of silver ions that can be stabilized.

Most of the original disclosure with respect to citric acid recites about 5-10% by volume (e.g., specification page 13, line 13; page 14, line 4; page 21, line 10; original claims 6-7, 9). "Fig. 6 also illustrates that silver citrate is not stable at high concentrations in the 1.0% citric acid solutions" (page 23, lines 19-20).

Fourth, applicant states that the support for claim 44 is found at page 13, line 13 and page 23, line 8. The specification does not even mention the relevant percentages at those places.

Therefore, the totality of the disclosure taken together would have conveyed to the skilled artisan in this field that there was insufficient descriptive support for the now-claimed subject matter of claim 44. Claim 45 is included in this rejection because it reads on the 4.07 ppm silver citrate feature of claim 44.

For these reasons, the claims must be rejected as lacking in adequate descriptive support.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 30 and 36-45 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: silver that is electrolytically generated in a solution of citric acid.

(1) As already noted previously in this Office action, the invention silver citrate was, without fail, originally described as being obtained by electrolytically generating silver in a solution of citric acid. Applicant even compared the invention silver citrate to conventional silver citrate (see the above reproduced parts of specification page 21)

and attributed the solubility difference to the electrolytically generated silver in a citric acid solution. Therefore, electrolytically generated silver in a citric acid solution is an essential element, which is omitted in the present claims. The claims are thereby rejected.

(2) Claims 30 and 36-37 are somewhat confusing in that "An aqueous solution of citric acid" is claimed but the only component recited is the $Ag^{+}CA^{-}$ complex. That is to say, citric acid does not follow "comprising," as it should. Note the different claim structure of claims 41-45, which do recite the citric acid after "comprising."

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 30, 36-40 are rejected under 35 U.S.C. 102(b) as being anticipated by Srivastava et al.

Srivastava et al. explicitly disclose a 0.5% aqueous solution of silver citrate in water (page 209, right column). Table I discloses antibacterial activity (page 211).

Independent claim 30 recites an aqueous solution of citric acid comprising the $Ag^{+}CA^{-}$ complex. Applicant asserts that the $Ag^{+}CA^{-}$ complex is different from conventional silver citrate because it is much more soluble (specification page 21, lines

14-17). Here, the cited prior art shows a much more soluble silver citrate. $Ag^{+}CA^{-}$ complex is presumed and the burden is shifted back to applicant to show otherwise.

In this regard, the 132 declaration filed by Pullman is noted (filed 3/27/2007). The Examiner cannot agree with Mr. Pullman's declaration statements or conclusions for the following reasons.

The fundamental flaw in the declaration is the premise that there must be something wrong with Srivastava's article because trisilver citrate cannot be soluble to 0.5% in water. Declaration Exhibit F is a Merck Index entry for silver citrate from 1968. Declarant admits, "Exhibit F ... which is a widely acknowledged as an important scientific reference of chemical compounds, is from the same period of time as Srivastava's article" (declaration paragraph 10). So, looking more closely into Exhibit F, the following is noted:

> **Silver Citrate.** Itrol; Silberol. $C_6H_5Ag_3O_7$; mol wt 512.74. Anhydr citric acid 37.47%, C 14.05%, H 0.98%, Ag 63.12%, O 21.84%.
>
> White, odorless, heavy, cryst powder; darkens in light. Soluble in 3500 parts water, more soluble in boiling water; readily soluble in dil HNO_3, ammonia. *Protect from light.*
>
> **Med. Use:** Has been used as antiseptic dusting powder for wounds.

At least since 1968, the skilled artisan in this field would have known that silver citrate is "readily soluble" in dilute nitric acid and ammonia. Hence the pH of the aqueous environment would have been clearly recognized as substantially influencing solubility.

Thus, in reading Srivastava's 0.5% silver citrate aqueous solution disclosure, published in 1970, one skilled in the art would have recognized that the additional solubility is completely acceptable, and not something that must be dismissed as most probably factual error or typographical error, as the declaration alleges.

Further, additional solubility is indicative of some change in how the silver reacts to its aqueous environment. Therefore, the Examiner has established sufficient basis for shifting the burden back to applicant in establishing that Srivastava's 0.5% aqueous solution of citric acid does not in fact contain a complex of the formula $Ag^{+}CA^{-}$.

In this regard, the Examiner notes the declaration comparison of Ag_3CA and Axenohl™. The flaw in this experimental design is that the declaration continues to disregard the 0.5% silver citrate concentration that is explicitly disclosed by Srivastava et al. 0.5% silver citrate in an acidic solution (as known in the art from "widely acknowledged as an important scientific reference") should have been tested since that is how one skilled in the art would know to obtain 0.5%. The declaration instead tests 0.04 g of silver citrate in 100 g of deionized water (0.04% by weight). The experiment was thus set up to fail: trisilver citrate solution was made and tested, so what else could result.

The declaration also criticizes the Srivastava article in another respect. The declaration states that the following sentence from the abstract shows Srivastava et al. could not have disclosed or had the silver citrate of the present invention: "Surgical

gauze treated with silver citrate showed good bacteriostatic activity but had not bactericidal activity." The declaration makes the argument that lack of bactericidal activity strongly suggests that Srivastava's silver citrate solution was not actually 0.5% in concentration. The Examiner cannot agree. The bactericidal activity protocol is provided by Srivastava et al. on page 210, right column. This is a rather unique protocol and specific to that particular experimental design for surgical gauzes. Such experiment does not provide any indication as to whether a 0.5% silver citrate solution not in a gauze would provide or not provide bactericidal activity in a different challenge test. Such indirect argument fails to overcome the explicit disclosure of 0.5% silver citrate aqueous solution. That is what was disclosed, so that is what applicant must show as being different, not some erroneously presumed lower concentration of silver.

It is noted that claims 30 and 36-40 require citric acid, some claims at concentrations of unspecified percentages. As discussed at the outset of this Office action, the percentages without specific basis therefor can be broadly interpreted to lack any limiting function. For example, "10% citric acid" could mean 10 wt% citric acid or 10% of a citric acid that is extremely dilute, which results or read on negligible or equilibrium amount of citric acid.

Relatedly, it is noted that citric acid's pKa_1 is 3.13, pKa_2 is 4.78, and pKa_3 is 6.43 (Dictionary of Organic Compounds, Vol. 2, page 1552, first column). This degree of difference in pKa's (i.e. not too large) means that acidic content of a citric acid solution

has substantial contribution from all three protons. However, if the predominant species in the aqueous solution of citric acid were dihydrogen citrate (mono-deprotonated citric acid), silver ions would react to make silver dihydrogen citrate, $Ag^{+}CA^{-}$. Thus, it would have been reasonable to the skilled artisan to understand that the more acidic the solution that contains citric acid is, the more protonated species would predominate, and more likely it is that the mono-deprotonated CA^{-} species (dihydrogen citrate) would be present in higher concentration. Again, such consideration further supports the shifting of the burden back to applicant to show that the 0.5% silver citrate explicitly disclosed by Srivastava et al. does not contain $Ag^{+}CA^{-}$, as applicant asserts.

For these reasons, all claimed features are met and the claims are anticipated.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 30 and 36-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Newman et al. (US 6,838,095).

It is noted that applicant claims all the way back to a domestic priority of 60/061,673, the filing date of which predates the earliest date of Newman's priority applications. However, as discussed earlier in this Office action, all claims currently

pending recite or read on new matter. Therefore, no benefit of any earlier filed applications can be granted for the purpose of this prior art-based ground of rejection. The filing date of all claims cannot be earlier than 6/19/2003, the filing date of this application.

Newman et al. disclose a complex of a single silver ion with a dibasic (mono-deprotonated) citrate. See column 5, lines 28-29 and claim 16. The source of the silver ion can be virtually any silver compound that provides the silver ion (column 3, lines 54-62). 1:2 molar ratio to 1:20 molar ratio of silver to dibasic citrate is disclosed (column 5, lines 35-36). Note, the complex is 1:1 silver to dibasic citrate, but the 1:2 to 1:20 molar ratio is referring to the quantity present in the solution. Newman's claim 15 discloses silver concentration to not exceed about 10,000 ppm and claims 25-28 discloses about 10-100 ppm to about 10,000 ppm silver concentration. Molar ratio of the citric acid or citrate present in the composition always exceeds the amount taken up by the complex and ranges from 1:1.5 to 1:200 (claims 21-23). Adding both citric acid and citrate is disclosed (Example 1).

Newman's monosilver dibasic citrate complex appears to be the same complex as applicant's $Ag^{+}CA^{-}$. Newman's 10 to 10,000 ppm concentration of the silver citrate complex would be within applicant's claimed concentrations for the $Ag^{+}CA^{-}$ complex. As for the % feature of the citric acid, such feature, by volume or otherwise, has been

discussed earlier as being broad enough to read on equilibrium concentration of citric acid with the silver complex.

Therefore, the claimed invention, as a whole, would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made, because every element of the invention and the claimed invention as a whole have been fairly disclosed or suggested by the teachings of the cited reference.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 30 and 36-45 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-7 of U.S. Patent No. 6,197,814. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the full reasons set forth on page 7 of the Office action of 8/12/2005. The patented claims disclose the $Ag^{+}CA^{-}$ complex (claim 7), citric acid has a concentration of greater than 1.0% by volume (claims 4-5), and the silver citrate has a concentration of ≥ 5 ppm silver (claim 5). One having ordinary skill in the art would have therefore recognized the instant invention as an obvious variation of the claimed invention in the cited patent.

Claims 30 and 36-45 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 4, 9, 18-19 and 30-32 of copending Application No. 10/936,465. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reasons.

The copending claims recite or read on a composition that contains silver dihydrogen citrate + water + citric acid. The citric acid can be present in an amount greater than 5% or greater than 10% (claims 30-32).

Even though the specific concentration of the silver dihydrogen citrate claimed in the instant application is not expressly claimed in the copending application claims,

such range of concentration given the well known silver antimicrobial activity would have been within the skill of the ordinary skilled artisan. Therefore, the ordinary skilled artisan in this field would have recognized that the instant invention is an obvious variation of the invention claimed in the copending application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 30 and 36-45 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 4, 9, 18-19 and 30-32 of copending Application No. 11/144,398. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the same reasons as those set forth above for 10/936,465. The affected claims of the two copending applications are substantially the same, so the same reasons apply. Therefore, the ordinary skilled artisan in this field would have recognized that the instant invention is an obvious variation of the invention claimed in the copending application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim 30 and 36-45 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of copending

Application No. 11/729,175. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reasons.

Claim 1 of the copending application is directed to a composition comprising anhydrous silver dihydrogen citrate and citric acid. First, this composition is open to an aqueous solution thereof. Second, water could be added from the motivation to more easily apply the silver active ingredient, and the result would be the subject matter of the instant application, wherein the various aqueous concentration percentages would have been obtained from the various concentrations readable on copending claim 1. Therefore, the ordinary skilled artisan in this field would have recognized that the instant invention is an obvious variation of the invention claimed in the copending application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 30 and 36-45 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 16-19, 21-24 and 31 of copending Application No. 11/407,654. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reasons.

Copending claims are readable on an aqueous solution of silver citrate formed by electrolytically generating silver ions within a solution of citric acid (claim 16). The

electrolytically generated silver citrate can form the $Ag^{+}CA^{-}$ complex (claim 18). The originally generated silver citrate can have a concentration of 1-10,000 ppm (claims 22 and 24).

Even though the copending claims do not specify the concentration of the citric acid, one having ordinary skill in the art would have been motivated to supply sufficient citric acid to complex with the generated silver and to have sufficient excess to shift the equilibrium to formation of the complex. Such amount would have been within the instant claimed amounts. Therefore, the ordinary skilled artisan in this field would have recognized that the instant invention is an obvious variation of the invention claimed in the copending application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

The outstanding obviousness type double patenting ground of rejection over 10/434,742 is hereby withdrawn because the claims there are now directed to a process of making (see restriction requirement history).

The outstanding obviousness type double patenting ground of rejection over 11/060,013 is hereby withdrawn because the elected and examined claims there are now directed to a distinct process of treating a food product (see restriction requirement history).

The outstanding obviousness type double patenting ground of rejection over 10/846,221 is hereby withdrawn because that case has been abandoned.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to JOHN PAK whose telephone number is **(571)272-0620.** The Examiner can normally be reached on Monday to Friday from 8 AM to 4:30 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's SPE, Johann Richter, can be reached on **(571)272-0646**.

The fax phone number for the organization where this application or proceeding is assigned is **(571)273-8300**.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571)272-1600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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